

SAFETY DATA SHEET

RODENTOX PLUS Rodenticide Pellet/Granule bait

Date of preparation: 21.03.2016

Version No.: 1

SECTION 1. Identification of the preparation and the company

1.1. Identification of the mixture: **RODENTOX PLUS Rodenticide Pellet/Granule bait**

1.2. Relevant identified uses of the mixture

Use: for control of rats and mice

Uses advised against: forbidden to use against non-target animals

1.3. Producer and supplier:

Bábolna Bioenvironmental Centre Ltd.

Address: H-1107 Budapest, Szállás u. 6.

Phone: (36-1) 432-0400

Fax: (36-1) 432-0401

E-mail: info@babolna-bio.com

1.4. Emergency phone numbers: +36-80 201-199 (24 hours), OTTSZ, HU

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the mixture

According to Regulation (EC) No 1272/2008:

Hazard classification and category: Not required

Hazard symbol: not required

Signal word: not required

Hazard statements: not required

2.2. Label elements

Hazard symbol: not required

Signal word: not required

Hazard statements: not required

Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor

P501 Dispose of contents and container in accordance with the local requirements / the instruction of the label

2.3. Other hazards

Not known. According the Annex XIII. the mixture do not match the criteria of persistent and bioaccumulative and toxic (PBT) substances or very persistent and very bioaccumulative (vPvB) substances.

SECTION 3. Composition/information on ingredients

3.1: substance: not applicable 3.2: mixture:					
Ingredients	%	Nr. EC	Nr. CAS	Classification according to Regulation 1272/2008/EC	
				Hazard class and category code	Code of hazard statements
Brodifacoum	0.005	259-980-5	56073-10-0	Acute toxicity 1 Acute toxicity 2 STOT RE 1 Aquatic toxicity, acute 1 Aquatic toxicity, chronic 1.	H300, H310, H372 H400 H410

H statements are fully listed in Section 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

4.1.1.

Inhalation: Not relevant

Skin: Remove any contaminated clothing items and wash them before wearing them again. Wash skin with large amount of water and soap. Consult a physician if symptoms persist.

Eye: Keep the eye open by using your fingers and wash your eye thoroughly with large amount of water for a couple of minutes. If you wear contact lenses, remove them immediately. Consult a physician if symptoms persist.

Ingestion: Due to bitter taste, swallowing is unlikely. Seek medical advice immediately and show the container, label or safety data sheet of the product. Induce vomiting only if your physician ordered you to do so. Wash your mouth thoroughly. Do not eat or drink! Rest in a warm place and consult your doctor. Do not give anything by mouth to an unconscious person. Do not administer large quantities (1-2 litres) of liquid at once, milk or substances containing fat and alcohol.

4.1.2.

As the mixture contains anticoagulant active ingredient, blood coagulation disorders may occur when ingested. The bitter additive considerably reduces the probability of incidental consumption. Symptoms of intoxications: Sickness, pale skin, vomiting, haemophilia, bleeding mycoderm, melaena and haematuria, diarrhea, bleeding of nose and gums, internal haemorrhage. The effects appear progressively, within 12-18 hours from ingestion.

In case of possible intoxication or suspicion thereof get immediate medical attention!
ANTIDOTE: K1-vitamin / Konakion inj./

Removal and treatment of the shoes and clothes of the exposed person are not necessary immediately. After the first aid treatment wash the contaminated clothes.
Protective clothes and equipment is not necessary for the first-aid.

4.2. Most important symptoms and effects, both acute and delayed

See 4.1.2.

4.3. Indication of any immediate medical attention and special treatment needed

Instructions to physicians:

Pharmacodynamic action: the active substance of the product is a competitive antagonist of Vitamin K and reduces the hepatic synthesis of Vitamin K-dependent factors. Following ingestion, the product may reduce coagulation and cause internal bleeding. There may be several days between the exposure and the appearance of symptoms. Give Vitamin K1 to the patient, if you notice the characteristic symptoms of poisoning (nasal bleeding, gum bleeding, haematuria (blood in urine), longer coagulation time, hematomas of bigger extent or of greater frequencies, suddenly appearing, unusual visceral pain). If bleeding is not noticeable, the prothrombin time (INR) needs to be measured within 48-72 hours following exposition. If the prothrombin time is greater than 4 hours, the patient needs to get Vitamin K1 intravenously.

Treatment: in case of ingestion of large quantities, induce vomiting, perform gastric lavage and monitor prothrombin activity; if it reduces, give Vitamin K. The efficacy of the treatment needs to be monitored by laboratory measurements.

Contraindications: anticoagulants.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: dry powder, CO₂ and foam

If needed, water can be used to extinguish fires.

Unsuitable extinguishing media: -

5.2. Special hazards arising from the substance or mixture

Like any other substance, this mixture may produce toxic fumes of carbon monoxide if burning.

Special fire-fighting measures: not required.

5.3. Advice for fire-fighters

Fire-fighters are advised to wear special protective equipment and breathing apparatus with independent oxygen supply.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- protective gloves are recommended
- evacuation of the danger area or consultation of an expert is not required

6.1.2. For emergency responders

Emergency attendance is not required.

6.2. Environmental precautions

Avoid release of the mixture into living waters.

6.3. Methods and material for containment and cleaning up

6.3.1. Containment of the area is not required.

Shovel into a container that can be well closed and is labelled.

See Section 13 for information on further handling.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

7.1.1. Store out of reach of children and pets.

7.1.2. Do not to eat, drink and smoke in work areas.

Wash hands after use.

7.2. Conditions for safe storage, including any incompatibilities

- store in a cold, dry place, away from sunlight and humidity
- keep out of reach of children and animals
- keep away from food, drink and animal feedingstuffs

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

No exposure limits have been established for this mixture.

8.2. Individual protection measures and personal protective equipment

Protection of eyes/face: not required

Protection of hands: Use of protective gloves is recommended for professional users.

No special requirements apply with respect to the material of these gloves.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Appearance: solid, blue granules

Colour: blue

Odour: non-typical , odour threshold: unknown

Relative density (25 °C): 1.31 g/cm³

pH value: 6.9

Melting point: no data

Boiling temperature: not applicable

Flash point: not applicable

Flammability: non-flammable

Explosive properties: non-explosive

Lower/upper explosion limits in air: not applicable

Autoignition: not applicable

Vapour pressure (20 °C): not applicable

Solubility in water: no data

Viscosity (20 °C): not applicable

Oxidising properties: none

9.2. Other information: No relevant data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

This mixture has no properties that would present reactivity hazards. Hazardous incompatibility does not typical between the mixture and other material during transport, storage or usage.

10.2. Stability

The mixture is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3. Possibility of hazardous reactions

The mixture will not react under excess pressure or heat.

10.4. Conditions to avoid

Conditions such as high temperature, light and humidity may lead to the deterioration of the product, but not result in a hazardous situation.

10.5. Incompatible materials

Not known.

10.6. Hazardous decomposition products

Not known.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

mixture: no data:

Calculated for the product:

Acute oral LD ₅₀ (rat)	>2000 mg/kg
Acute dermal LD ₅₀ (rabbit)	>2000 mg/kg

Toxicological information on Brodifacoum active ingredient:

Rat LD50 dermal acute	7,48 mg/kg bw (female rats)
Rat NOAEL	0,04 mg/ kg bw/day
Skin irritation	Not irritating
Eye irritation	Not irritating
Skin sensitization	Not skin reaction (LLNA test on mice)
Maternaltoxicity (rabbit):	LOAEL 0,004 mg/kg bw/day/ NOAEL 0,002 mg/kg bw/day

SECTION 12. Ecological information

12.1. Toxicity: no data available for the product.

12.2. Persistence and degradability: no data available for the product.

12.3 Bioaccumulative potential: Octanol-water: log Pow: no data available for the product.

12.4 Mobility in soil: no data available for the product.

12.5 Results of PBT and vPvB assessment: not applicable.

12.6 Other adverse effects: no data available for the product.

Ecological information on Brodifacoum active ingredient

<i>Oncorhynchus mykiss</i>	96 h LC50 = 0,042 mg/L (nominal)
<i>Daphnia magna</i>	48 hours immobilization EC50 = 0,25 mg/L (nominal)
<i>Selenastrum capricornutum</i>	72 hours growth rate (gr) ErC50 = 0,04 mg/L

SECTION 13. Disposal

13.1.: Waste treatment methods: The mixture and its container should be disposed according to the national requirements.

In large quantity it should be treated and disposed of as hazardous waste. Recommended method: incineration

SECTION 14. Transport information

Non dangerous goods.

SECTION 15. Regulatory information

15.1: Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation 1907/2006/EC of the European Parliament and of the Council on the registration, evaluation, authorisation and restriction of chemicals (REACH)

15.2 Chemical Safety Assessment: none

SECTION 16. Other information

Full text of the H hazard statements listed in Section 3.

H hazard statements

300 Fatal if swallowed.

310 Fatal in contact with skin.

372 Repeated or prolonged exposure may cause damage to organs.

400 Very toxic to aquatic life.

410 Very toxic to aquatic life with long lasting effects.

Reason of the new version:

End of the Safety Data Sheet